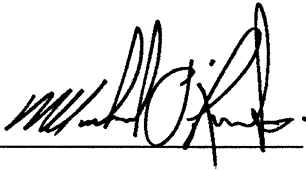


Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			
Building number, street name		Unit no.	Lot/con.
Municipality VAUGHAN	Postal code	Plan number/ other description	
B. Individual who reviews and takes responsibility for design activities			
Name MICHAEL O'ROURKE		Firm HVAC DESIGNS LTD.	
Street address 375 FINLEY AVE		Unit no. 202	Lot/con. N/A
Municipality AJAX	Postal code L1S 2E2	Province ONTARIO	E-mail info@hvacdsgns.ca
Telephone number (905) 619-2300	Fax number (905) 619-2375	Cell number ()	
C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1 OF Division C]			
☐ House ☒ HVAC – House ☐ Building Structural ☐ Small Buildings ☐ Building Services ☐ Plumbing – House ☐ Large Buildings ☐ Detection, Lighting and Power ☐ Plumbing – All Buildings ☐ Complex Buildings ☐ Fire Protection ☐ On-site Sewage Systems			
Description of designer's work HEAT LOSS / GAIN CALCULATIONS DUCT SIZING RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY RESIDENTIAL SYSTEM DESIGN per CSA-F280-12		Model: 25-3 Project: KLEINBURG GLEN	
D. Declaration of Designer			
I, <u>MICHAEL O'ROURKE</u> declare that (choose one as appropriate): (print name)			
☐ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories. Individual BCIN: _____ Firm BCIN: _____			
☒ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code. Individual BCIN: <u>19669</u> Basis for exemption from registration and qualification: <u>O.B.C SENTENCE 3.2.4.1 (4)</u>			
☐ The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification: _____			
I certify that:			
1. The information contained in this schedule is true to the best of my knowledge.			
2. I have submitted this application with the knowledge and consent of the firm.			
<u>January 14, 2016</u> Date		 Signature of Designer	

NOTE:

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d). of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

SITE NAME: KLEINGURG GLEN
BUILDER: GOLD PARK HOMES
DATE: Jan-16
LO# 66857
TYPE: 25-3
GFA: 2013
WINTER NATURAL AIR CHANGE RATE 0.300
SUMMER NATURAL AIR CHANGE RATE 0.091
HEAT LOSS AT °F. 76
HEAT GAIN AT °F. 16
CSA-F280-12
SB-12 PACKAGE J

ROOM USE EXP. WALL CLG. HT.	MBR	ENS	WIC	BED-2	BED-3	BATH	FOY	WIR	KT/FM	DIN	FACTORS LOSS GAIN	GRS.WALL AREA GLAZING	FACTORS LOSS GAIN
32	23	9	9	29	29	40	57	18	73	15	24.1 17.1	304	207
10	9	9	9	9	9	9	9	9	9	9	24.1 17.1	0	0
24.1 17.1	0	0	0	0	0	0	0	0	0	0	24.1 17.1	0	0
24.1 42.7	24	337	598	0	0	0	0	0	0	0	24.1 42.7	24	578
24.1 26.1	0	0	0	0	0	0	0	0	0	0	24.1 26.1	0	0
24.1 42.7	0	0	0	0	0	0	0	0	0	0	24.1 42.7	0	0
24.1 87.8	0	0	0	0	0	0	0	0	0	0	24.1 87.8	0	0
25.2 5.0	0	0	0	0	0	0	0	0	0	0	25.2 5.0	0	0
26.2 6.0	0	0	0	0	0	0	0	0	0	0	26.2 6.0	0	0
280 967	191	193	667	132	81	280	55	245	846	167	234 808	160	325
6.3 1.3	0	0	0	0	0	0	0	0	0	0	216 328	160	222
1.5 0.7	231	361	171	231	361	171	231	361	171	231	216 328	160	222
2.5 1.2	0	0	0	0	0	0	0	0	0	0	216 328	160	222
2.5 0.5	0	0	0	0	0	0	0	0	0	0	216 328	160	222
1897	1387	819	109	1667	796	2294	1677	2294	1677	2294	0.20 0.22	2294	1677
0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22
422	264	87	6	371	600	611	85	611	85	611	0.20 0.22	611	85
71	0	0	0	0	0	0	0	0	0	0	0.20 0.22	0	0
2	480	0	0	0	0	0	0	0	0	0	0.20 0.22	0	0
744	0	0	0	0	0	0	0	0	0	0	0.20 0.22	0	0
2319	1451	1118	148	2038	3020	2805	2291	1340	6279	1294	2319	2805	2291
3487	1118	148	148	2038	3020	2805	2291	1340	6279	1294	3487	2805	2291

ROOM USE EXP. WALL CLG. HT.	FACTORS LOSS GAIN	GRS.WALL AREA GLAZING	FACTORS LOSS GAIN	GRS.WALL AREA GLAZING	FACTORS LOSS GAIN	GRS.WALL AREA GLAZING	FACTORS LOSS GAIN	GRS.WALL AREA GLAZING	FACTORS LOSS GAIN	GRS.WALL AREA GLAZING	FACTORS LOSS GAIN	GRS.WALL AREA GLAZING	FACTORS LOSS GAIN
24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1	24.1 17.1
24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7
24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1	24.1 26.1
24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7	24.1 42.7
24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8	24.1 87.8
25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0	25.2 5.0
3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7	3.5 0.7
6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3	6.3 1.3
1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7	1.5 0.7
2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2	2.5 1.2
2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5	2.5 0.5
1897	1387	819	109	1667	796	2294	1677	2294	1677	2294	1677	2294	1677
0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22	0.20 0.22
422	264	87	6	371	600	611	85	611	85	611	0.20 0.22	611	85
71	0	0	0	0	0	0	0	0	0	0	0.20 0.22	0	0
2	480	0	0	0	0	0	0	0	0	0	0.20 0.22	0	0
744	0	0	0	0	0	0	0	0	0	0	0.20 0.22	0	0
2319	1451	1118	148	2038	3020	2805	2291	1340	6279	1294	2319	2805	2291
3487	1118	148	148	2038	3020	2805	2291	1340	6279	1294	3487	2805	2291

TOTAL HEAT GAIN BTU/H: 24459
TONS: 2.04
LOSS DUE TO VENTILATION LOAD BTU/H: 2149
STRUCTURAL HEAT LOSS: 38036
TOTAL COMBINED HEAT LOSS BTU/H: 40184

**SITE NAME: KLEINGBURG GLEN
BUILDING: GOLD PARK HOMES**

TYPE: 25-3 DATE: Jan-16 LO# 68857

HEATING CFM 700 COOLING CFM 700
TOTAL HEAT LOSS 38,036 TOTAL HEAT GAIN 24,035
AIR FLOW RATE CFM 18.4 AIR FLOW RATE CFM 29.12

EL195UH045XE24B 45
FAN SPEED
LOW 0
MEDIUM 0
HIGH 700

AFUE = 95.0 %
INPUT (BTU/H) = 44,000
OUTPUT (BTU/H) = 42,000

RUN COUNT	4th	3rd	2nd	1st	Bas
S/A	0	0	6	2	3
R/A	0	0	3	6	1

All S/A diffusers 4"x10" unless noted otherwise on layout.

All S/A runs 5"Ø unless noted otherwise on layout.

RUN #	1	2	3	4	5	7	13	14	15	16	18	19	21	23	24
ROOM NAME	MBR	ENS	WIC	BED-2	BED-3	BATH	DIN	r/a pressure	KT/FM	KT/FM	W/R	FOY	BAS	BAS	BAS
RM LOSS MBH	2.32	1.45	0.48	2.04	3.02	2.81	1.29	2.09	2.09	2.09	1.34	3.67	4.45	4.45	4.45
CFM PER RUN HEAT	43	27	9	37	56	52	24	39	39	39	25	68	82	82	82
RM GAIN MBH	3.49	1.12	0.15	2.37	3.74	2.29	1.93	2.31	2.31	2.31	0.27	0.80	0.32	0.32	0.32
CFM PER RUN COOLING	102	33	4	69	109	67	56	67	67	67	8	23	9	9	9
ADJUSTED PRESSURE	0.16	0.17	0.17	0.15	0.15	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16
EQUIVALENT LENGTH	38	41	45	31	45	59	22	21	25	35	9	39	25	17	36
TOTAL EFFECTIVE LENGTH	228	181	225	191	155	209	122	161	135	135	179	129	125	127	146
ADJUSTED PRESSURE	0.07	0.1	0.08	0.09	0.1	0.08	0.14	0.11	0.13	0.13	0.1	0.13	0.13	0.13	0.11
ROUND DUCT SIZE	6	4	4	5	6	5	4	5	5	5	4	5	5	5	5
HEATING VELOCITY (ft/min)	219	310	103	272	286	382	275	286	286	286	287	499	602	602	602
COOLING VELOCITY (ft/min)	520	379	46	507	556	492	642	492	492	492	92	169	66	66	66
OUTLET GRILL SIZE	4X10	3X10	3X10	3X10	4X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10	3X10
TRUNK	A	A	A	C	C	B	C	A	A	A	C	B	A	C	B

RUN #	ROOM NAME	RM LOSS MBH	CFM PER RUN HEAT	RM GAIN MBH	CFM PER RUN COOLING	ADJUSTED PRESSURE	EQUIVALENT LENGTH	TOTAL EFFECTIVE LENGTH	ADJUSTED PRESSURE	ROUND DUCT SIZE	HEATING VELOCITY (ft/min)	COOLING VELOCITY (ft/min)	OUTLET GRILL SIZE
TRUNK	A	A	A	C	C	B	C	A	A	A	A	A	B

SUPPLY AIR TRUNK SIZE	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
TRUNK A	278	0.07	9	10	8	500	0	0.00	0	0	8	0	0	0	8
TRUNK B	480	0.07	11	14	8	617	0	0.00	0	0	8	0	0	0	8
TRUNK C	224	0.09	7.8	8	8	504	0	0.00	0	0	8	0	0	0	8
TRUNK D	0	0.00	0	0	8	0	0	0.00	0	0	8	0	0	0	8
TRUNK E	0	0.00	0	0	8	0	0	0.00	0	0	8	0	0	0	8
TRUNK F	0	0.00	0	0	8	0	0	0.00	0	0	8	0	0	0	8

RETURN AIR #	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)	TRUNK CFM	STATIC PRESS.	ROUND DUCT	RECT DUCT	VELOCITY (ft/min)
1	1	2	3	4	5	700	0.06	13.2	20	8
2	0	0	0	0	0	700	0.06	13.2	24	10
3	0	0	0	0	0	700	0.06	13.2	24	10
4	0	0	0	0	0	700	0.06	13.2	24	10
5	0	0	0	0	0	700	0.06	13.2	24	10
6	0	0	0	0	0	700	0.06	13.2	24	10
7	0	0	0	0	0	700	0.06	13.2	24	10
8	0	0	0	0	0	700	0.06	13.2	24	10
9	0	0	0	0	0	700	0.06	13.2	24	10
10	0	0	0	0	0	700	0.06	13.2	24	10
11	0	0	0	0	0	700	0.06	13.2	24	10
12	0	0	0	0	0	700	0.06	13.2	24	10
13	0	0	0	0	0	700	0.06	13.2	24	10
14	0	0	0	0	0	700	0.06	13.2	24	10
15	0	0	0	0	0	700	0.06	13.2	24	10
16	0	0	0	0	0	700	0.06	13.2	24	10
17	0	0	0	0	0	700	0.06	13.2	24	10
18	0	0	0	0	0	700	0.06	13.2	24	10
19	0	0	0	0	0	700	0.06	13.2	24	10
20	0	0	0	0	0	700	0.06	13.2	24	10
21	0	0	0	0	0	700	0.06	13.2	24	10
22	0	0	0	0	0	700	0.06	13.2	24	10
23	0	0	0	0	0	700	0.06	13.2	24	10
24	0	0	0	0	0	700	0.06	13.2	24	10

TYPE: 25-3
SITE NAME: KLEINGBURG GLEN

LO # 66857

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

COMBUSTION APPLIANCES		9.32.3.1(1)
a)	☒ Direct vent (sealed combustion) only	
b)	☐ Positive venting induced draft (except fireplaces)	
c)	☐ Natural draft, B-vent or induced draft gas fireplace	
d)	☐ Solid Fuel (including fireplaces)	
e)	☐ No Combustion Appliances	

HEATING SYSTEM	
☒ Forced Air	☐ Non Forced Air
☐ Electric Space Heat	

HOUSE TYPE		9.32.1(2)
☒	I Type a) or b) appliance only, no solid fuel	
☐	II Type I except with solid fuel (including fireplaces)	
☐	III Any Type c) appliance	
☐	IV Type I, or II with electric space heat	
☐	Other: Type I, II or IV no forced air	

SYSTEM DESIGN OPTIONS		O.N.H.W.P.
☐	1 Exhaust only/Forced Air System	
☐	2 HRV with Ducting/Forced Air System	
☒	3 HRV Simplified/connected to forced air system	
☐	4 HRV with Ducting/non forced air system	
☐	Part 6 Design	

TOTAL VENTILATION CAPACITY		9.32.3.3(1)
Basement + Master Bedroom	2 @ 21.2 cfm	42.4 cfm
Other Bedrooms	2 @ 10.6 cfm	21.2 cfm
Kitchen & Bathrooms	4 @ 10.6 cfm	42.4 cfm
Other Rooms	2 @ 10.6 cfm	21.2 cfm
Table 9.32.3.A.	TOTAL	127.2 cfm

PRINCIPAL VENTILATION CAPACITY REQUIRED		9.32.3.4.(1)
1 Bedroom	31.8	cfm
2 Bedroom	47.7	cfm
3 Bedroom	63.6	cfm
4 Bedroom	79.5	cfm
5 Bedroom	95.4	cfm
More than 5 - Part 6	TOTAL	63.6 cfm

SUPPLEMENTAL VENTILATION CAPACITY		9.32.3.5.
Total Ventilation Capacity	127.2	cfm
Less Principal Ventil. Capacity	77	cfm
Required Supplemental Capacity	50.2	cfm

PRINCIPAL EXHAUST FAN CAPACITY			
Model: VANEE 40H+	Location: BSMT		
77.0 cfm	3.0 sones		
☒ HVI Approved			
PRINCIPAL EXHAUST HEAT LOSS CALCULATION			
CFM	ΔT °F	FACTOR	% LOSS
77.0 CFM	X 76 F	X 1.08	X 0.34

SUPPLEMENTAL FANS		NUTONE
Location	Model	cfm
ENS	QTXEN050C	50
BATH	QTXEN050C	50
W/R	QTXEN050C	50

HEAT RECOVERY VENTILATOR		9.32.3.11.
Model: VANEE 40H+		
77 cfm high	42 cfm low	
66 % Sensible Efficiency	☒ HVI Approved	
@ 32 deg F (0 deg C)		

LOCATION OF INSTALLATION	
Lot:	Concession
Township	Plan:
Address	
Roll #	Building Permit #

BUILDER:		GOLD PARK HOMES
Name:		
Address:		
City:		
Telephone #:	Fax #:	

INSTALLING CONTRACTOR	
Name:	
Address:	
City:	
Telephone #:	Fax #:

DESIGNER CERTIFICATION	
I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code.	
Name:	HVAC Designs Ltd.
Signature:	<i>Michael O'Rourke</i>
HRAI #	001820
Date:	January-16

HEAT LOSS AND GAIN SUMMARY SHEET

MODEL: 25-3	BUILDER: GOLD PARK HOMES
SFQT: 2013	SITE: KLEINGBURG GLEN
LO# 66857	

DESIGN ASSUMPTIONS

HEATING	°F	COOLING	°F
OUTDOOR DESIGN TEMP.	-4	OUTDOOR DESIGN TEMP.	88
INDOOR DESIGN TEMP.	72	INDOOR DESIGN TEMP. (MAX 75°F)	73

BUILDING DATA

ATTACHMENT:	DETACHED	# OF STORIES (+BASEMENT):	3
FRONT FACES:	WEST	ASSUMED (Y/N):	Y
AIR CHANGES PER HOUR:	3.57	ASSUMED (Y/N):	Y
AIR TIGHTNESS CATEGORY:	AVERAGE	ASSUMED (Y/N):	Y
WIND EXPOSURE:	SHELTERED	ASSUMED (Y/N):	Y
HOUSE VOLUME (ft³):	26406.0	ASSUMED (Y/N):	Y
INTERNAL SHADING:	BLINDS/CURTAINS	ASSUMED OCCUPANTS:	4
INTERIOR LIGHTING LOAD (Btu/h/ft²):	1.27	DC BRUSHLESS MOTOR (Y/N):	Y
FOUNDATION CONFIGURATION	BCIN_1	DEPTH BELOW GRADE:	7.0 ft
LENGTH: 61.0 ft	WIDTH: 19.0 ft	EXPOSED PERIMETER:	160.0 ft

2012 OBC - COMPLIANCE PACKAGE

Component	Compliance Package
	J
Ceiling with Attic Space Minimum RSI (R)-Value	50
Ceiling Without Attic Space Minimum RSI (R)-Value	31
Exposed Floor Minimum RSI (R)-Value	31
Walls Above Grade Minimum RSI (R)-Value	22
Basement Walls Minimum RSI (R)-Value	12
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value	-
Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value	10
Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value	10
Windows and Sliding Glass Doors Maximum U-Value	1.8
Skylights Maximum U-Value	2.8
Space Heating Equipment Minimum AFUE	0.94
HRV Minimum Efficiency	60%
Domestic Hot Water Heater Minimum EF	0.67

INDIVIDUAL BCIN: 19669

MICHAEL O'ROURKE



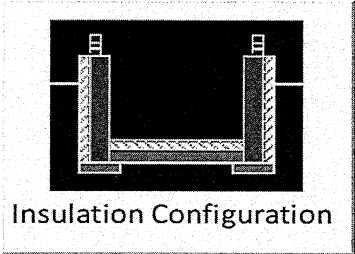
Air Infiltration Residential Load Calculator

Supplemental tool for CAN/CSA-F280

Weather Station Description				
Province:	Ontario ▼			
Region:	Vaughan (Woodbridge) ▼			
Weather Station Location:	Open flat terrain, grass ▼			
Anemometer height (m):	10			
Local Shielding				
Building Site:	Suburban, forest ▼			
Walls:	Heavy ▼			
Flue:	Heavy ▼			
Highest Ceiling Height (m):	6.1			
Building Configuration				
Type:	Detached ▼			
Number of Stories:	Two ▼			
Foundation:	Full ▼			
House Volume (m ³):	773.7			
Air Leakage/Ventilation				
Air Tightness Type:	Present (1961-) (ACH=3.57) ▼			
Custom BDT Data:	ELA @ 10 Pa. ▼ 716.42 cm² 3.57 ACH @ 50 Pa			
Mechanical Ventilation (L/s):	Total Supply:	Total Exhaust:		
	0	0		
Flue Size				
Flue #:	#1	#2	#3	#4
Diameter (mm):	0	0	0	0
Natural Infiltration Rates				
Heating Air Change Rate (ACH/H):		0.300		
Cooling Air Change Rate (ACH/H):		0.091		

Residential Foundation Thermal Load Calculator

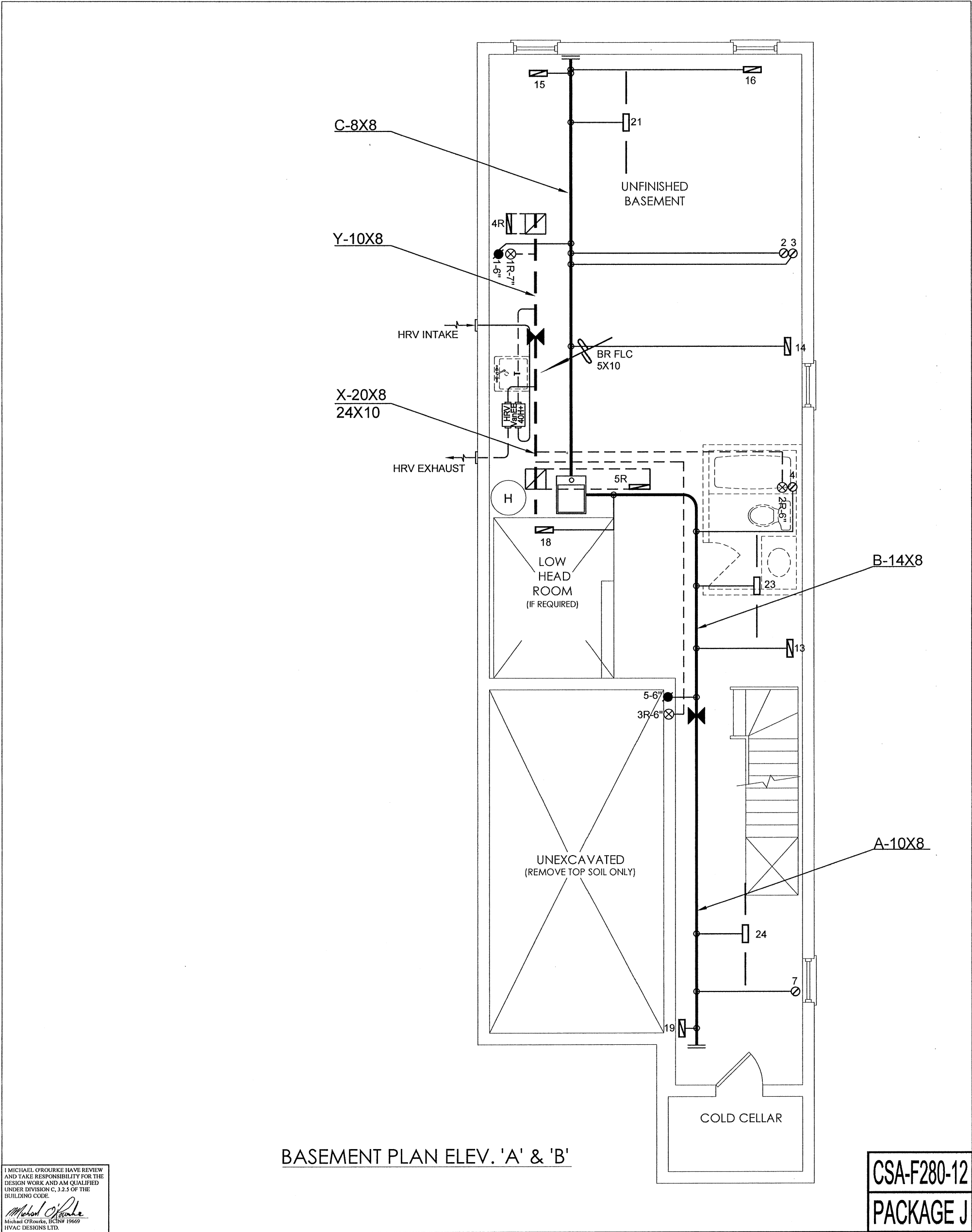
Supplemental tool for CAN/CSA-F280

Weather Station Description		
Province:	Ontario	▼
Region:	Vaughan (Woodbridge)	▼
Site Description		
Soil Conductivity:	Normal conductivity: dry sand, loam, clay	▼
Water Table:	Normal (7-10 m, 23-33 Ft)	▼
Foundation Dimensions		
Floor Length (m):	16.6	 Insulation Configuration
Floor Width (m):	5.8	
Exposed Perimeter (m):	0	
Wall Height (m):	2.7	
Depth Below Grade (m):	2.1	
Window Area (m ²):	1.1	
Door Area (m ²):	1.9	
Radiant Slab		
Heated Fraction of the Slab:	0	
Fluid Temperature (°C):	33	
Design Months		
Heating Month	1	
Foundation Loads		
Heating Load (Watts):	1506	

44.8

2.6 119.86

119.06



BASEMENT PLAN ELEV. 'A' & 'B'

CSA-F280-12
PACKAGE J

HVAC LEGEND								3.						
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.						
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.						
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.	Description	Date				
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS						
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Client		 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.				HEAT LOSS 40184 BTU/H UNIT DATA		# OF RUNS S/A R/A FANS		Sheet Title BASEMENT HEATING LAYOUT				
Project Name KLEINBURG GLEN VAUGHAN, ONTARIO						MAKE LENNOX		3RD FLOOR						
						MODEL EL195UH045XE24B-45		2ND FLOOR				6	3	2
						INPUT 44 MBTU/H		1ST FLOOR				6	2	2
						OUTPUT 42 MBTU/H		BASEMENT				3	1	0
25-3		2013 sqft		COOLING 2.0 TONS		ALL S/A DIFFUSERS 4"x10" UNLESS NOTED OTHERWISE ON LAYOUT. ALL S/A RUNS 5"Ø UNLESS NOTED OTHERWISE ON LAYOUT. UNDERCUT DOORS 1" min. FOR R/A		Date JAN/2016						
				FAN SPEED 700 cfm @ 0.6" w.c.				Scale 3/16" = 1'-0"						
								BCIN# 19669						
								LO# 66857						

I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C, 3.2.5 OF THE BUILDING CODE.

Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

GROUND FLOOR PLAN ELEV. 'A'

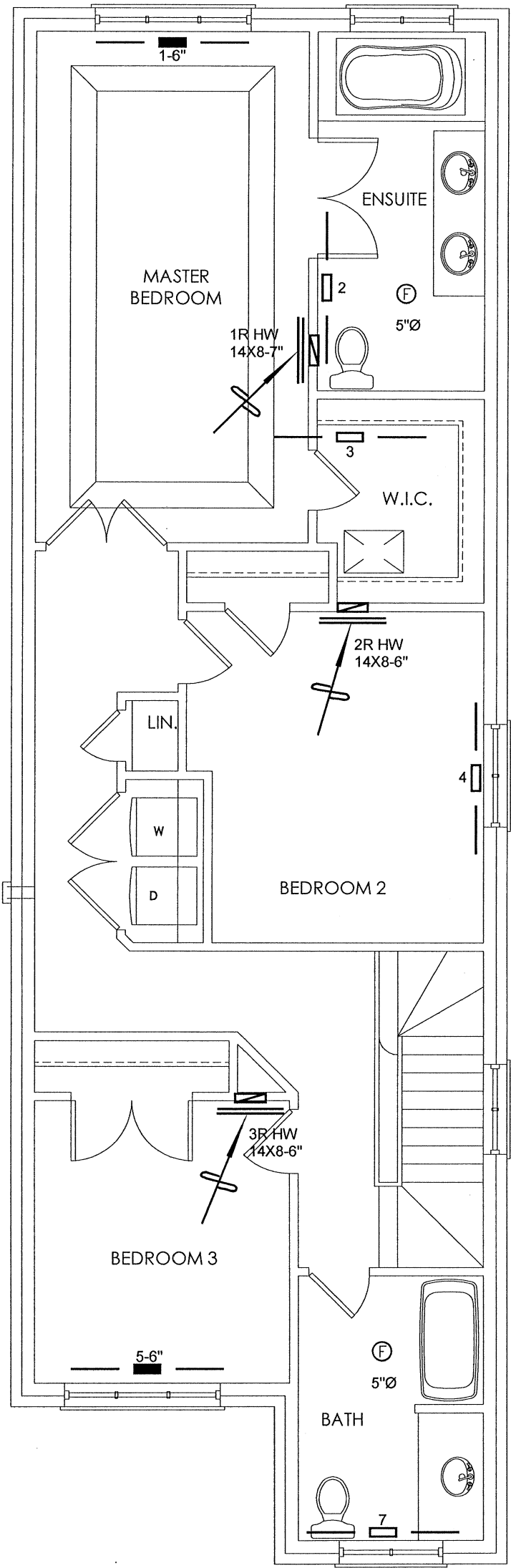
CSA-F280-12
PACKAGE J

HVAC LEGEND							3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.	
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.	
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.	Description
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS	

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Client		 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services	Sheet Title	
GOLD PARK HOMES			GROUND FLOOR HEATING LAYOUT	
Project Name		Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.	Date	JAN/2016
KLEINBURG GLEN VAUGHAN, ONTARIO			Scale	3/16" = 1'-0"
			BCIN# 19669	
25-3	2013 sqft		LO#	66857

PART. SEC. FLR. PLAN FOR OPT. LAUNDRY LAYOUT (STD. PLAN ONLY)



SECOND FLOOR PLAN ELEV. 'A'

CSA-F280-12
PACKAGE J

I MICHAEL O'ROURKE HAVE REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK AND AM QUALIFIED UNDER DIVISION C.3.2.5 OF THE BUILDING CODE.
Michael O'Rourke
Michael O'Rourke, BCIN# 19669
HVAC DESIGNS LTD.

HVAC LEGEND							3.		
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	2.	
	FLOOR SUPPLY AIR GRILLE		6" SUPPLY AIR BOOT ABOVE		14"x8" RETURN AIR GRILLE		RETURN AIR STACK ABOVE	1.	
	FLOOR SUPPLY AIR GRILLE 6" BOOT		SUPPLY AIR STACK FROM 2nd FLOOR		30"x8" RETURN AIR GRILLE		RETURN AIR STACK 2nd FLOOR	No.	Description Date
	SUPPLY AIR BOOT ABOVE		6" SUPPLY AIR STACK 2nd FLOOR		FRA- FLOOR RETURN AIR GRILLE		REDUCER	REVISIONS	

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Client GOLD PARK HOMES		 375 Finley Ave. Suite 202 - Ajax, Ontario L1S 2E2 Tel. 905.619.2300 - 905.420.5300 Fax 905.619.2375 Email: info@hvacdesigns.ca Web: www.hvacdesigns.ca Specializing in Residential Mechanical Design Services Installation to comply with the latest Ontario Building Code. All supply branch outlets shall be equipped with a manual balancing damper. Ductwork which passes through the garage or unheated spaces shall be adequately insulated and be gas-proofed.	Sheet Title SECOND FLOOR HEATING LAYOUT	
Project Name KLEINBURG GLEN VAUGHAN, ONTARIO			Date JAN/2016	
25-3			Scale 3/16" = 1'-0"	
2013 sqft			BCIN# 19669	
			LO#	66857